



NEXT GENERATION 9-1-1 FOUNDATIONS

The Commonwealth's 9-1-1 system is dependent on decades old technology and is tethered to voice-centric communications. It relies on an analog network that is quickly going out of service and places limitations on the reliable delivery of 9-1-1 service. The Commonwealth is moving forward to evolve 9-1-1 and ensure quality service to its citizens and visitors. To accomplish this, the Virginia 9-1-1 Services Board has begun moving to a Next Generation 9-1-1 (NG9-1-1) system. NG9-1-1 is based on a modern internet protocol (IP) network, that has the ability to deliver calls to the appropriate 9-1-1 center faster, transfer 9-1-1 calls and associated data anywhere needed, interconnect with other public safety systems and databases, and in the future, securely receive multimedia communications like text, photos and videos. As service providers begin abandoning the legacy circuit-switched technology, the urgency to update the 9-1-1 infrastructure to NG9-1-1 increases tremendously. Actions to transform the outdated system into a digital network that is faster, more efficient, and has greater capabilities to serve Virginia is currently underway. For up to date information visit Virginia's NG9-1-1 Deployment Dashboard available at: <https://www.vaemergency.gov/911-geospatial/psc-9-1-1-services/ng9-1-1-deployment/>

TRANSITION PLANNING AND DEPLOYMENTS

Recognizing the need to ensure a timely and comprehensive deployment of this important service, the Virginia 9-1-1 Services Board contracted for the development of a internet protocol based 9-1-1 network feasibility study in 2014. The study, developed through statewide stakeholder input, recommended the Commonwealth implement an emergency services internet protocol (IP) network (ESInet), essentially a network-of-networks (much like the internet), to advance toward NG9-1-1. Like the internet, there will need to be standards in place to ensure all participants interoperate in a secure and appropriate manner. The study recommended over 100 tasks the Commonwealth needs to complete to accomplish this goal. Key among them was the establishment of governance for required standards. Working with all stakeholder groups, the board determined that it is in the best position to provide that governance and to coordinate with surrounding states to ensure seamless interoperability. As a result, they have adopted guiding principles (below), and a legislative position that was enacted by the General Assembly. That legislation defined the board's authority with NG9-1-1. As shown in the diagram below, this authority only includes those areas within the red circle which are part of the existing 9-1-1 system and have governance through the State Corporation Commission (SCC), Federal Communications Commission (FCC) or local governments. As one of the board's guiding principles states, it will take full stakeholder engagement for NG9-1-1 to be successfully implemented. While the Board's legislative position addressed governance, it does not address sustainable funding for NG9-1-1. Currently there is a NG9-1-1 Sustainable Funding Committee that has been established and tasked with researching and making recommendations to the 9-1-1 Services Board. Visit the dashboard above to learn more about the steps localities are taking to reach NG9-1-1.

Guiding Principles For a Successful NG9-1-1 Transition

- 9-1-1 & GIS are essential, local/regional, public safety services
- Address all of 9-1-1 not just NG
- Stakeholder engagement is needed
- Services must not be degraded
- Economies need to be leveraged
- Doing nothing is NOT an option

